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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/763,866

Applicant(s)

EYTCHEISON ET AL.

Examiner

FARHAD ALI

Art Unit

2146

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Warren (US 2003/0204612 A1).

Warren teaches:

Claim 1

A method comprising:

detecting at least one device (See figure 4, number 404 “identify network element”);

detecting a protocol associated with each device (See figure 4, number 406 “identify communications protocol”);

matching the detected protocol with a protocol translator module; and using a protocol translator module to translate a command formatted in the protocol into a translated command formatted in a common application programming interface (See figure 4, number 414 “translate device command” and paragraph [0020] “In a particular

embodiment, manager 102 communicates using a web services protocol, and abstraction device 106 translates between the web services protocol and the protocols used by network elements 108. This may allow manager 102 to communicate with different network elements 108 using a common protocol").

Claim 2

The method according to claim 1, further comprising searching for the device from a plurality of devices based on a device identifier (paragraph [0065] "Device identifier").

Claim 3

The method according to claim 1, further comprising searching for the device from a plurality of devices based on a content type (paragraph [0065] "Device identifier" and "Other and/or additional information may be included in identification information 352 without departing from the scope of the present invention").

Claim 4

The method according to claim 1, further comprising searching for the device from a plurality of devices based on a device type (paragraph [00703] "Device type identifier").

Claim 5

The method according to claim 1, further comprising searching for the device from a plurality of devices based on a device's availability (paragraph [0065] "Device identifier" and "Other and/or additional information may be included in identification information 352 without departing from the scope of the present invention").

Claim 6

The method according to claim 1, further comprising searching for the protocol translator module (paragraph [0070] "Abstraction device 206 identifies the communications protocol used by the identified network element 108 at step 406. This may include, for example, command translator 234 using device information 254 and/or device type information 256 in database 236 to identify the communications protocol").

Claim 7

A system comprising:

means for detecting at least one device (See figure 4, number 404 "identify network element");

means for detecting a protocol associated with each device (See figure 4, number 406 "identify communications protocol");

means for matching the detected protocol with a protocol translator module; and
means for using the protocol translator module to translate a command formatted in the protocol into a translated command formatted in a common application programming

interface (See figure 4, number 414 "translate device command" and paragraph [0020] "In a particular embodiment, manager 102 communicates using a web services protocol, and abstraction device 106 translates between the web services protocol and the protocols used by network elements 108. This may allow manager 102 to communicate with different network elements 108 using a common protocol").

Claim 8

A method comprising:

detecting at least one service (See figure 4, number 404 "identify network element");

detecting a protocol associated with each service (See figure 4, number 406 "identify communications protocol");

matching the detected protocol with a protocol translator module; and using a protocol translator module to translate a command formatted in the protocol into a translated command formatted in a common application programming interface (See figure 4, number 414 "translate device command" and paragraph [0020] "In a particular embodiment, manager 102 communicates using a web services protocol, and abstraction device 106 translates between the web services protocol and the protocols used by network elements 108. This may allow manager 102 to communicate with different network elements 108 using a common protocol").

Claim 9

A method comprising:

detecting a plurality of devices wherein each unique device communicates using a corresponding protocol (See figure 4, number 404 "identify network element"); and
displaying an indication of each device if a protocol translator module is matched with the corresponding protocol (See figure 4, number 406 and 412, "identify network element" and "Map information").

Claim 10

The method according to claim 9, further comprising detecting the corresponding protocol from each device (See figure 4, number 406 "identify communications protocol").

Claim 11

The method according to claim 9, further comprising storing the protocol translator module (paragraph [0052], "Database 236 may include any hardware, software, firmware, or combination thereof suitable to store and facilitate retrieval of information. Database 236 may store any suitable information used by abstraction device 206 to perform command translation or other functions" and paragraph [0054], "Database 236 may also store device type information 256. Device type information 256 may, for example, identify each device type in system 100, the communications protocol

used by each of the device types, and any other suitable information about the device types”).

Claim 12

The method according to claim 9, further comprising translating a command formatted in the corresponding protocol into a translated command formatted in a common application programming interface through the protocol translator module (See figure 4, number 414 “translate device command” and paragraph [0020] “In a particular embodiment, manager 102 communicates using a web services protocol, and abstraction device 106 translates between the web services protocol and the protocols used by network elements 108. This may allow manager 102 to communicate with different network elements 108 using a common protocol”).

Claim 13

The method according to claim 9, further comprising searching for a specific device from the plurality of devices based on a device identifier (paragraph [0065] “Device identifier”).

Claim 14

The method according to claim 9, further comprising searching for a specific device from the plurality of devices based on a content type (paragraph [0065] “Device

identifier" and "Other and/or additional information may be included in identification information 352 without departing from the scope of the present invention").

Claim 15

The method according to claim 9, further comprising searching for a specific device from the plurality of devices based on a device type (paragraph [00703] "Device type identifier").

Claim 16

The method according to claim 9, further comprising searching for a specific device from the plurality of devices based on a device's availability (paragraph [0065] "Device identifier" and "Other and/or additional information may be included in identification information 352 without departing from the scope of the present invention").

Claim 17

A method comprising: identifying a plurality of protocol translator modules wherein each protocol translator module is associated with a unique protocol; storing a list representing the plurality of protocol translator modules (paragraph [0052], "Database 236 may include any hardware, software, firmware, or combination thereof suitable to store and facilitate retrieval of information. Database 236 may store any suitable information used by abstraction device 206 to perform command translation or

other functions” and paragraph [0054], “Database 236 may also store device type information 256. Device type information 256 may, for example, identify each device type in system 100, the communications protocol used by each of the device types, and any other suitable information about the device types”);

displaying an indication of each device having a device protocol that is compatible with one of the plurality of protocol translator modules in the list(See figure 4, number 406 “identify communications protocol”); and

translating a command formatted in the device protocol into a translated command formatted in a common application programming interface through one of the plurality of protocol translator modules (See figure 4, number 414 “translate device command” and paragraph [0020] “In a particular embodiment, manager 102 communicates using a web services protocol, and abstraction device 106 translates between the web services protocol and the protocols used by network elements 108. This may allow manager 102 to communicate with different network elements 108 using a common protocol”).

Claim 18

The method according to claim 17, further comprising searching for additional protocol translator modules (paragraph [0052], “Database 236 may include any hardware, software, firmware, or combination thereof suitable to store and facilitate retrieval of information. Database 236 may store any suitable information used by abstraction device 206 to perform command translation or other functions”).

Claim 19

The method according to claim 18, further comprising updating the index in response to the searching for additional protocol translator modules (paragraph [0052], "Database 236 may include any hardware, software, firmware, or combination thereof suitable to store and facilitate retrieval of information. Database 236 may store any suitable information used by abstraction device 206 to perform command translation or other functions").

Claim 20

A system comprising: an application configured for operating through a common application programming interface (paragraph [0032] "Abstraction device 106 may include any hardware, software, firmware, or combination thereof for facilitating communication between components of system 100");

a first device configured for operating using a first protocol; a second device configured for operating using a second protocol; and a protocol translation layer configured for searching for a first protocol translation module corresponding to the first protocol and for searching for a second protocol translation module corresponding to the second protocol (paragraph [0006] "The apparatus further includes a plurality of protocol converters, each operable to receive at least one device command, translate the at least one device command from a first protocol to a second protocol, and communicate the at least one device command to one or more network or non-network

device elements. At least two of the protocol converters are operable to translate the at least one device command into different second protocols”).

Claim 21

The system according to claim 20, wherein the protocol translation layer is configured for translating a first command formatted in the first protocol into a command formatted in the common application programming interface for use by the application (paragraph [0028] “Abstraction device 106 may, for example, receive a command from manager 102, translate the command from the protocol used by manager 102 into another protocol, and communicate the translated command to one or more network elements 108” and paragraph [0020] “In a particular embodiment, manager 102 communicates using a web services protocol, and abstraction device 106 translates between the web services protocol and the protocols used by network elements 108. This may allow manager 102 to communicate with different network elements 108 using a common protocol”).

Claim 22

The system according to claim 20, further comprising a presentation layer configured for displaying the first device after locating the first protocol translation module (paragraph [0032] “Abstraction device 106 may include any hardware, software,

firmware, or combination thereof for facilitating communication between components of system 100”);

Claim 23

A network protocol translation system comprising:

a processor that executes a run time process that uses only a single application programming interface for network communication (paragraph [0032] “Abstraction device 106 may include any hardware, software, firmware, or combination thereof for facilitating communication between components of system 100”);

wherein the processor enables the run time process to communicate via a first network protocol by executing a first translation module that translates between the first network protocol and the application programming interface; and wherein the processor enables the run time process to communicate via a second network protocol, different from the first network protocol, by executing a second translation module that translates between the second network protocol and the application programming interface (See figure 4, number 414 “translate device command” and paragraph [0006] “The apparatus further includes a plurality of protocol converters, each operable to receive at least one device command, translate the at least one device command from a first protocol to a second protocol, and communicate the at least one device command to one or more network or non-network device elements. At least two of the protocol converters are operable to translate the at least one device command into different second protocols”).

Claim 24

A method, executed on a computing platform, comprising the acts of:

executing a run time process that uses only a single application programming interface for network communication (paragraph [0032] "Abstraction device 106 may include any hardware, software, firmware, or combination thereof for facilitating communication between components of system 100");

enabling the run time process to communicate via a first network protocol by executing a first translation module that translates between the first network protocol and the application programming interface; and enabling the run time process to communicate via a second network protocol, different from the first network protocol, by executing a second translation module that translates between the second network protocol and the application programming interface (See figure 4, number 414 "translate device command" and paragraph [0006] "The apparatus further includes a plurality of protocol converters, each operable to receive at least one device command, translate the at least one device command from a first protocol to a second protocol, and communicate the at least one device command to one or more network or non-network device elements. At least two of the protocol converters are operable to translate the at least one device command into different second protocols").

Response to Arguments

3. Applicant's arguments filed 01/07/2008 have been fully considered but they are not persuasive.

Applicant has argued:

Within the Office Action, Claims 1-24 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0204612 to Warren ("Warren"). The Applicants respectfully disagree. Warren does not teach translating a command formatted in a protocol into a translated command formatted in a common application programming interface.

Warren teaches a system and method for facilitating device communication, management and control in a network. The apparatus of Warren includes a command translator operable to receive the command and generate at least one device command corresponding to the command. [Warren, Abstract] Warren also teaches that the apparatus includes a plurality of protocol converters each operable to receive at least one device command, translate the at least one device command from a first protocol to a second protocol, and communicate the at least one device command to one or more network elements. [Warren, Abstract] Warren does not teach translating a command formatted in a protocol into a translated command formatted in a common application programming interface.

Warren teaches that an abstraction device 106 may allow a manager 102 to communicate and exchange information with a network element 108 when manager 102 and network element 108 use different communication protocols. [Warren, ¶ 0020] Warren further teaches that in a particular embodiment, the manager 102 communicates using a web services protocol, and abstraction device 106 translates between the web services protocol and the protocols used by network elements 108, which allows the manager 102 to communicate with different network elements 108 using a common protocol. [Warren, ¶ 0020] However, this common protocol referred to within the teachings of Warren is specifically related to the manager 102 and not formatted in a common application programming interface, as claimed within the presently pending claims. As described above, Warren does not teach translating a command formatted in a protocol into a translated command formatted in a common application programming interface.

The examiner respectfully disagrees. The applicant has argued that while Warren teaches a manager 102 that communicated with different network elements 108 using a common protocol, that this protocol is related to the manager and not formatted in a common application programming interface. Further, the applicant has argued that Warren does not teach translating a command formatted in a protocol into a translated command formatted in a common application programming interface. The examiner strongly disagrees with this statement. The last part of the claim as written and interpreted by one of ordinary skill claims a protocol translator module, which translates a command in a particular protocol, into a command in a common API. The examiner asserts that Warren teaches this. Repeated below for convenience, Warren teaches that the manager 102 communicates using a web services protocol, and abstraction device 106 translates between the web services protocol and the protocols used by network elements 108, which allows the manager 102 to communicate with different network elements 108 using a common protocol. In Warren, the manager using a common protocol, is able to communicate through the abstraction device, which translates the protocol of the particular network element into the common protocol used by the manager.

The independent Claim 9 is directed to a method comprising detecting a plurality of devices wherein each unique device communicates using a corresponding protocol and displaying an indication of each device if a protocol translator module is matched with the corresponding protocol. Warren does not teach displaying an indication of each device if a protocol translator module is matched with the corresponding protocol. Warren teaches identifying communications protocol used by a network element

and mapping information in command to a device command, but not displaying an indication if a protocol translator module is matched with the corresponding protocol. For at least these reasons, the independent Claim 9 is allowable over the teachings of Warren.

The examiner disagrees. In paragraph [0058] Warren teaches: "In addition, database 236 may include registration information 266. In one embodiment, the web services protocol used in system 100 supports the "publication" of information about a web service. For example, the publication may include making information available that identifies the existence of the web service, the function provided by the web service, and how to invoke the web service. This information may be made available to manager 102, other network components, other web services, a web services registry, and/or any other suitable entity. In this embodiment, network elements 108 may be managed as a web service. Registration information 266 may identify each network element 108 and how to invoke features or functions of network elements 108. In a particular embodiment, registration information 266 includes information used by a Universal Description, Discovery and Integration (UDDI) registry in system 100, which stores information about various web services in one or more directories. Registration information 266 may also include Web Services Description Language (WSDL) information identifying how to format requests to a network element 108". Here the publication of this information would constitute displaying an indication.

The independent Claim 23 is directed to a network protocol translation system comprising a processor that executes a run time process that uses only a single application programming interface for network communication, wherein the processor enables the run time process to communicate via a first

network protocol by executing a first translation module that translates between the first network protocol and the application programming interface and wherein the processor enables the run time process to communicate via a second network protocol, different from the first network protocol, by executing a second translation module that translates between the second network protocol and the application programming interface. As described above, Warren does not teach a processor that executes a run time process that uses only a single application programming interface for network communication. Warren teaches translating into protocols corresponding to specific devices. For at least these reasons, the independent Claim 23 is allowable over the teachings of Warren.

The examiner disagrees. Warren does teach the use of a single application programming interface through the use of the manager. Please see the remarks made above.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FARHAD ALI whose telephone number is (571)270-1920. The examiner can normally be reached on Monday thru Friday, 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey C. Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. A./
Examiner, Art Unit 2146

/Jeffrey Pwu/
Supervisory Patent Examiner, Art Unit 2146